

Title (en)  
Quantification and imaging methods of the echo-texture feature

Title (de)  
Quantifizierung und Visualisierung von Ultraschalltexturen

Title (fr)  
Quantification et visualisation des textures ultrasons

Publication  
**EP 2980757 A1 20160203 (EN)**

Application  
**EP 14178875 A 20140729**

Priority  
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Abstract (en)  
The present invention provides quantification and imaging methods and a system of the echo-texture feature, comprising: obtaining an ultrasonic image; calculating all the pixel values in a selected ROI of the ultrasonic image to obtain a regional standard deviation; excluding pixels with a pixel value smaller than a multiple of the regional standard deviation in the selected ROI; counting a set of pixels centered around a N<sup>th</sup> pixel to gather a N<sup>th</sup> local mean, a N<sup>th</sup> local variance and a N<sup>th</sup> local coefficient of variance corresponding the set of pixel values, wherein N is from 1 to the number of the pixels remaining in the selected ROI; and obtaining an echo-texture index according to the local means, the local variances, or the local coefficient of variances. The imaging of echo texture which shows the echo texture distribution of the selected ROI with a color scale changing continuously from red to blue is also included. A parameter is provided to adjust the visualization enhancement of the echo texture.

IPC 8 full level  
**G06T 7/40** (2006.01)

CPC (source: EP)  
**G06T 7/40** (2013.01); **G06T 2207/10132** (2013.01)

Citation (search report)  
• [IY] US 5224175 A 19930629 - GOUGE JAMES O [US], et al  
• [Y] US 5743266 A 19980428 - LEVENE HAROLD [US], et al

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